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EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
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EXE

Mod

EDT

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EDSYN  
LBA

110

---

```
CCCCCCCC HH HH MM MM IIIIII NN NN SSSSSSSS CCCCCCCC HH HH RRRRRRRR
CCCCCCCC HH HH MM MM IIIIII NN NN SSSSSSSS CCCCCCCC HH HH RRRRRRRR
CC CC HH HH MMM MMM II II NN NN SS SSSSSSSS CC CC HH HH RR RR RR
CC CC HH HH MMM MMM II II NN NN SS SSSSSS CC CC HH HH RR RR RR
CC CC HH HH MM MM II II NN NN SS SSSSSS CC CC HH HH RR RR RR
CC CC HH HH MM MM II II NN NN SS SSSSSS CC CC HH HH RR RR RR
CC CC HH HH MM MM II II NN NN SS SSSSSS CC CC HH HH RR RR RR
CC CC HH HH MM MM II II NN NN SS SSSSSS CC CC HH HH RR RR RR
CCCCCCCC HH HH MM MM IIIIII NN NN SSSSSSSS CCCCCCCC HH HH RR RR RR
CCCCCCCC HH HH MM MM IIIIII NN NN SSSSSSSS CCCCCCCC HH HH RR RR RR

LL IIIIII SSSSSSSS
LL IIIIII SSSSSSSS
LL II SS
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LL II SSSSSS
LL II SSSSSS
LL II SS
LL II SS
LL II SS
LL II SS
LLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS
```

:  
:

```
0001 0 %TITLE 'EDT$CHMINSCHR - insert a string of characters'
0002 0 MODULE EDT$CHMINSCHR ( ! Insert a string of characters
0003 0 IDENT = 'V04-000' ! File: CHMINSCHR.BLI Edit: JBS1010
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0026 1 *
0027 1 *
0028 1 *****
0029 1
0030 1
0031 1 ++
0032 1 FACILITY: EDT -- The DEC Standard Editor
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 This module does a (change mode) insertion of a string of
0037 1 characters at the current position in the text.
0038 1
0039 1 ENVIRONMENT: Runs at any access mode - AST reentrant
0040 1
0041 1 AUTHOR: Bob Kushlis, CREATION DATE: Unknown
0042 1
0043 1 MODIFIED BY:
0044 1
0045 1 1-001 - Original. DJS 04-Feb-1981. This module was created by
0046 1 extracting the routine INSERT_CHARS from the module CHANGE.BLI.
0047 1 1-002 - Regularize headers. JBS 02-Mar-1981
0048 1 1-003 - Change SPLIT_LINE to EDT$$SPLIT_LNINS. JBS 30-Mar-1981
0049 1 1-004 - Fix up some comments. JBS 02-Jun-1981
0050 1 1-005 - Use new message codes. JBS 04-Aug-1981
0051 1 1-006 - New screen update logic. JBS 13-Sep-1982
0052 1 1-007 - Replace call to edt$$tst_eob. STS 22-Sep-1982
0053 1 1-008 - Add a parameter to the split line routine. SMB 16-Nov-1982
0054 1 1-009 - Change the parameter to split line routine. SMB 17-Nov-1982
0055 1 1-010 - Change the call to EDT$$MRK_LNCHG. JBS 27-Dec-1982
0056 1 --
0057 1
```

EDT\$CHMINSCHR  
V04-000

EDT\$CHMINSCHR - insert a string of characters  
Declarations

J 14  
16-Sep-1984 00:01:27  
14-Sep-1984 12:22:36

VAX-11 Bliss-32 V4.0-742  
[EDT.SRC]CHMINSCHR.BLI;1

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```
59 0058 1 %SBTTL 'Declarations'
60 0059 1
61 0060 1 | TABLE OF CONTENTS:
62 0061 1 |
63 0062 1 |
64 0063 1 REQUIRE 'EDTSRC:TRAROUNAM';
65 0502 1
66 0503 1 FORWARD ROUTINE
67 0504 1     EDT$$INS_STR;
68 0505 1
69 0506 1 |
70 0507 1 | INCLUDE FILES:
71 0508 1 |
72 0509 1 |
73 0510 1 REQUIRE 'EDTSRC:EDTREQ';
74 0645 1
75 0646 1 |
76 0647 1 | MACROS:
77 0648 1 |
78 0649 1 |     NONE
79 0650 1 |
80 0651 1 | EQUATED SYMBOLS:
81 0652 1 |
82 0653 1 |     NONE
83 0654 1 |
84 0655 1 | OWN STORAGE:
85 0656 1 |
86 0657 1 |     NONE
87 0658 1 |
88 0659 1 | EXTERNAL REFERENCES:
89 0660 1 |
90 0661 1 |     In the routine
```

! Insert a string of characters at the current position

```

: 92 0662 1 %SBTTL 'EDT$$INS_STR - insert a string of characters'
: 93 0663 1
: 94 0664 1 GLOBAL ROUTINE EDT$$INS_STR (
: 95 0665 1 S,
: 96 0666 1 L
: 97 0667 1 ) =
: 98 0668 1
: 99 0669 1 !++
100 0670 1 FUNCTIONAL DESCRIPTION:
101 0671 1
102 0672 1 Insert a string of characters at the current position in the text.
103 0673 1
104 0674 1 FORMAL PARAMETERS:
105 0675 1
106 0676 1 S a pointer to the string
107 0677 1 L the length of the string
108 0678 1
109 0679 1 IMPLICIT INPUTS:
110 0680 1
111 0681 1 EDT$$A_SEL_POS
112 0682 1 EDT$$A_LN_END
113 0683 1 EDT$$G_LN_LEN
114 0684 1 EDT$$A_LN_PTR
115 0685 1 EDT$$T_LN_BUF
116 0686 1
117 0687 1 IMPLICIT OUTPUTS:
118 0688 1
119 0689 1 EDT$$A_SEL_POS
120 0690 1 EDT$$A_LN_PTR
121 0691 1
122 0692 1 ROUTINE VALUE:
123 0693 1
124 0694 1 1 = success, 0 = error (line overflow)
125 0695 1
126 0696 1 SIDE EFFECTS:
127 0697 1
128 0698 1 NONE
129 0699 1
130 0700 1 --
131 0701 1
132 0702 2 BEGIN
133 0703 2
134 0704 2 EXTERNAL ROUTINE
135 0705 2 EDT$$MSG_BELL : NOVALUE,
136 0706 2 EDT$$MRK_LNCHG : NOVALUE,
137 0707 2 EDT$$CS_OP,
138 0708 2 EDT$$UPD_LNLEN : NOVALUE,
139 0709 2 EDT$$SEL_RNGPOS,
140 0710 2 EDT$$SPLT_LNINS : NOVALUE;
141 0711 2
142 0712 2 EXTERNAL
143 0713 2 EDT$$A_SEL_POS,
144 0714 2 EDT$$A_LN_END,
145 0715 2 EDT$$G_LN_LEN,
146 0716 2 EDT$$A_WK_LN : REF LIN_BLOCK,
147 0717 2 EDT$$Z_EOB_LN,
148 0718 2 EDT$$A_LN_PTR,
! Current character pointer
! Output a message to the terminal with a warning bell
! Track line updates
! Move up a line
! Update the length of the current line
! Compare the select line with the current line
! Split a line of text at the current cursor position
! select position.
! End of current line pointer
! Length of current line
```

```
149 0719 2      EDT$ST_LN_BUF;          ! Line buffer
150 0720 2
151 0721 2      MESSAGES ((LINEXC255));
152 0722 2      !+
153 0723 2      !- First make sure the line will not overflow.
154 0724 2
155 0725 2
156 0726 2      IF (.EDT$$G_LN_LEN + .L GTRU 255)
157 0727 2      THEN
158 0728 2          BEGIN
159 0729 2          EDT$$MSG_BELL (EDT$_LINEXC255);
160 0730 2          RETURN (0);
161 0731 2          END
162 0732 2      ELSE
163 0733 2          BEGIN
164 0734 2              LOCAL
165 0735 2              OLD_LPOINT;
166 0736 2
167 0737 2      !+
168 0738 2      !- Check for the old EOB.
169 0739 2
170 0740 2
171 0741 2      IF (.EDT$$A_WK_LN EQLA EDT$$Z_EOB_LN)
172 0742 2      THEN
173 0743 2          BEGIN
174 0744 2          EDT$$SPLT_LNINS (0);          ! Don't use optimizer
175 0745 2          EDT$$CS_UP ();
176 0746 2          END;
177 0747 2
178 0748 2      !+
179 0749 2      !- Compute the new cursor position.
180 0750 2
181 0751 2          OLD_LPOINT = .EDT$$A_LN_PTR;
182 0752 2          EDT$$A_LN_PTR = CH$PCUS (.EDT$$A_LN_PTR, .L);
183 0753 2      !+
184 0754 2      !- Open up a hole for the new characters.
185 0755 2
186 0756 2          EDT$$CPY_MEM (CH$DIFF (.EDT$$A_LN_END, .OLD_LPOINT), .OLD_LPOINT, .EDT$$A_LN_PTR);
187 0757 2
188 0758 2      !+
189 0759 2      !- And move them in.
190 0760 2
191 0761 2          EDT$$CPY_MEM (.L, .S, .OLD_LPOINT);
192 0762 2      !+
193 0763 2      !- Update the length of the line.
194 0764 2
195 0765 2          EDT$$UPD_LNLEN (.L);
196 0766 2      !+
197 0767 2      !- Record the insertion for the screen updater.
198 0768 2
199 0769 2          EDT$$MRK_LNCHG (SCR_EDIT_MODIFY, .OLD_LPOINT - EDT$ST_LN_BUF);
200 0770 2      !+
201 0771 2      !- Update select range if necessary.
202 0772 2
203 0773 2
204 0774 2      IF (EDT$$SEL_RNGPOS () EQL 0)
205 0775 2      THEN
```

EDT\$CHMINSCHR  
V04-000

EDT\$CHMINSCHR - insert a string of characters  
EDT\$\$INS\_STR - insert a string of characters

M 14  
16-Sep-1984 00:01:27  
14-Sep-1984 12:22:36

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[EDT.SRC]CHMINSCHR.BLI;1

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```
: 206      0776 3  !+
: 207      0777 3  !- The current line is the select line.
: 208      0778 3  !-
: 209      0779 3  !-
: 210      0780 3  !-
: 211      0781 3  !-
: 212      0782 3  !-
: 213      0783 3  !-
: 214      0784 3  !-
: 215      0785 1  !-

                IF CH$PTR_LSS (.OLD_LPOINT, .EDT$$A_SEL_POS) THEN EDT$$A_SEL_POS = CH$PLUS (.EDT$$A_SEL_POS, .L)

                RETURN (1);
                END;

END;
```

! of routine EDT\$\$INS\_STR

.TITLE EDT\$CHMINSCHR EDT\$CHMINSCHR - insert a string o  
f characters

.IDENT \V04-000\

.EXTRN EDT\$\$MSG\_BELL, EDT\$\$MRK\_LNCHG  
.EXTRN EDT\$\$CS\_OP, EDT\$\$UPD\_LNLEN  
.EXTRN EDT\$\$SEL\_RNGPOS  
.EXTRN EDT\$\$SPLT\_LNINS  
.EXTRN EDT\$\$A\_SEL\_POS, EDT\$\$A\_LN\_END  
.EXTRN EDT\$\$G\_LN\_LEN, EDT\$\$A\_WK\_LEN  
.EXTRN EDT\$\$Z\_EOB\_LN, EDT\$\$A\_LN\_PTR  
.EXTRN EDT\$\$T\_LN\_BUF, EDT\$LINEXC255

.PSECT \_EDT\$CODE, NOWRT, SHR, PIC, 2

```
.ENTRY EDT$$INS_STR, Save R2,R3,R4,R5,R6,R7,R8,R9 : 0664
MOVAB EDT$$A_SEL_POS, R9
MOVAB EDT$$A_LN_PTR, R8
MOVL L, R7 : 0726
ADDL3 R7, EDT$$G_LN_LEN, R0
CMPL R0, #255
BLEQU 1$
PUSHL #EDT$LINEXC255 : 0729
CALLS #1, EDT$$MSG_BELL : 0733
CLRL R0 : 0733
RET
MOVAB EDT$$Z_EOB_LN, R0 : 0742
CMPL EDT$$A_WK_LEN, R0
BNEQ 2$
CLRL -(SP) : 0745
CALLS #1, EDT$$SPLT_LNINS : 0746
CALLS #0, EDT$$CS_OP : 0752
MOVL EDT$$A_LN_PTR, OLD_LPOINT : 0753
ADDL2 R7, EDT$$A_LN_PTR : 0753
SUBL3 OLD_LPOINT, EDT$$A_LN_END, R1 : 0757
MOVL EDT$$A_LN_PTR, R0
MOVC3 R1, (OLD_LPOINT), (R0)
MOVC3 R7, @S, (OLD_LPOINT) : 0761
PUSHL R7 : 0765
CALLS #1, EDT$$UPD_LNLEN : 0769
MOVAB EDT$$T_LN_BUF, R0
SUBL3 R0, OLD_LPOINT, -(SP)
PUSHL #1
CALLS #2, EDT$$MRK_LNCHG : 0774
CALLS #0, EDT$$SEL_RNGPOS
```

```
03FC 00000
59 00000000G 00 9E 00002
58 00000000G 00 9E 00009
57 08 AC D0 00010
50 00000000G 00 57 C1 00014
000000FF 8F 50 D1 0001C
10 1B 00023
00000000G 00 8F DD 00025
00000000G 00 01 FB 0002B
50 00000000G 00 50 D4 00032
50 00000000G 00 04 00034
50 00000000G 00 9E 00035 1$:
50 00000000G 00 D1 0003C
10 12 00043
7E D4 00045
00000000G 00 01 FB 00047
00000000G 00 00 FB 0004E
56 68 D0 00055 2$:
68 57 C0 00058
51 00000000G 00 56 C3 0005B
50 68 D0 00063
60 66 51 28 00066
66 04 BC 57 28 0006A
57 DD 0006F
00000000G 00 01 FB 00071
50 00000000G 00 9E 00078
7E 56 50 C3 0007F
01 DD 00083
00000000G 00 02 FB 00085
00000000G 00 00 FB 0008C
```

EDT\$CHMINSCHR - insert a string of characters  
EDT\$INS\_STR - insert a string of characters

N 14  
16-Sep-1984 00:01:27  
14-Sep-1984 12:22:36

VAX-11 BLISS-32 V4.0-742  
[EDT.SRC]CHMINSCHR.BLI;1

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	50	D5	00093	
	08	12	00095	
69	56	D1	00097	
	03	1E	0009A	
69	57	C0	0009C	
50	01	D0	0009F	3\$:
		04	000A2	

```
TSTL      R0
BNEQ      3$
CML       OLD_LPOINT, EDT$$A_SEL_POS
BGEQU     3$
ADDL2     R7, EDT$$A_SEL_POS
MOVL      #1, R0
RET
```

0780  
0782  
0785

```
; Routine Size: 163 bytes,    Routine Base: _EDT$CODE + 0000
```

```

: 216      0786 1
: 217      0787 1 !<BLF/PAGE>

```

ED  
VO

EDT\$CHMINSCHR  
V04-000

EDT\$CHMINSCHR - insert a string of characters  
EDT\$\$INS\_STR - insert a string of characters

B 15  
16-Sep-1984 00:01:27  
14-Sep-1984 12:22:36

VAX-11 Bliss-32 V4.0-742  
[EDT.SRC]CHMINSCHR.BLI;1

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: 219 0788 1 END  
: 220 0789 1  
: 221 0790 0 ELUDOM

! of module EDT\$CHMINSCHR

# PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	163	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

# Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	11	2	40	00:00.2
_\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

# COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LISS:CHMINSCHR/OBJ=OBJ\$:CHMINSCHR MSRC\$:CHMINSCHR.BLI/UPDATE=(ENH\$:C  
HMINSCR)

: Size: 163 code + 0 data bytes  
: Run Time: 00:12.4  
: Elapsed Time: 00:14.3  
: Lines/CPU Min: 3816  
: Lexemes/CPU-Min: 11314  
: Memory Used: 81 pages  
: Compilation Complete

0131 AH-BT13A-SE  
VAX/VMS V4.0

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